

REMARKS

Claims 1-31, and 68 were previously pending in this application. Claim 12 has been amended. No claims have been added. As a result, claims 1-31 and 68 are pending for examination with claims 1, 12, 18 and 27 being independent claims. No new matter has been added.

Applicants would like to thank Examiner Koch and Examiner Crispino for their courtesies during a telephonic interview with James Hanifin and Shannon Pratt on June 21, 2004 and on June 22, 2004. Several of the rejections were discussed. The Examiners suggested that Applicants submit arguments, including the previously advanced arguments, for further consideration. The substance of the discussion is incorporated into the following remarks.

Claim Rejections Under 35 U.S.C. §103

Claims 1-12, and 14-16

Claims 1-12, and 14-16 stand rejected under 35 U.S.C. §103 as being unpatentable over Csipkes (U.S. Patent No. 6,122,936) in view of Uchura (U.S. Patent No. 4,916,811). Applicants respectfully traverse these rejections. Nevertheless, Applicants have amended claim 12, as discussed below, to further distinguish the references.

Independent claim 1 is directed towards an automated fiber preparation apparatus for optical fiber comprising, *inter alia*, a transporter that is constructed and arranged to automatically and simultaneously index a plurality of trays to a plurality of process stations in a direction from an upstream end of the transporter toward a downstream end of the transporter in response to a control signal. Each of the plurality of trays is configured to hold an optical fiber. The fiber preparation apparatus further comprises a strip tool and a cleave tool, each positioned at one of the plurality of process stations.

Csipkes discloses an apparatus for interconnecting optical fibers. The apparatus employs a precision handling tool 300 which holds, transports, and aligns the optical fibers as they are processed through the apparatus. The apparatus includes a plurality of optical fiber processing modules 130 that are supported on an automated optical workstation 100. Each processing module is configured to execute a different step of the optical fiber interconnect process. As shown in Fig. 1, a material transfer mechanism, such as a robot arm 140, is arranged above the

workstation to pick up, move and place the optical fiber precision handling tools between the separate modules.

Uehara discloses an apparatus for attaching a ferrule to each end of an optical fiber cable. The Uehara apparatus cuts and coils the fiber, and then the coiled fiber is placed on a conveyor rack 21, which is conveyed intermittently between process stations. At the various process stations, the sheath of the cable end is stripped, springs are attached to the cable, an adhesive is applied, and finally a ferrule is clamped onto the cable.

The Examiner recognizes that Csipkes does not disclose a transporter constructed and arranged to simultaneously index a plurality of trays to a plurality of work stations. However, the Examiner relies on Uehara as disclosing such a transporter, and asserts that it would have been obvious to one of ordinary skill in the art at the time of the invention to simultaneously index a plurality of trays to achieve greater throughput in the Csipkes manufacturing operation. Applicants respectfully disagree.

To establish a *prima facie* case of obviousness under §103, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. See MPEP §2143. The teaching or suggestion to make the claimed combination must be found in the prior art, not in the applicants' disclosure. See MPEP §2143. If the proposed modification or combination would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See MPEP §2143.01.

As discussed during the interview, one of ordinary skill in the art would not have been motivated to employ a conveyor-like transporter with the Csipkes apparatus. The Csipkes apparatus utilizes a transporter, such as robot arm 130, to support a tray (i.e., optical fiber precision handling tool) from above and to move the tray between process stations by lifting the tray from one process station and placing it down into another station. In Uehara, the transporter employs a conveyor which indexes a plurality of trays while supporting the trays from below. In Uehara, the trays sit on the conveyor and travel there along, intermittently stopping at each process station.

As discussed during the telephone interview, these teachings of Csipkes and Uehara are not compatible. More particularly, a tray could not be moved to the various process stations of the Csipkes apparatus using a conveyor-type transporter, such as disclosed by Uehara. The Csipkes apparatus requires a transporter that picks and places a tray out of and into the process tools. Employing a conveyor-type transporter with Csipkes would require a substantial modification or redesign of the Csipkes apparatus as well as a change in its basic principle of operation. Thus, one of ordinary skill in the art would not have been motivated to the combine Csipkes and Uehara as suggested by the Examiner.

In view of the foregoing, the Examiner has failed to set forth a *prima facie* case of obviousness. The references provide no teaching, suggestion or other motivation to combine Csipkes and Uehara as suggested in the Office Action, such that the rejection of claim 1 under §103 is improper and should be withdrawn.

Claims 2-11 and 14-16 depend from claim 1 and are patentable for at least the same reasons.

Claim 12 is directed towards an automated fiber preparation apparatus for optical fiber comprising, *inter alia*, a transporter that is constructed and arranged to automatically index a tray, which is configured to hold the optical fiber, to a plurality of process stations from an upstream end toward a downstream end of the transporter in response to a control signal. As amended, the transporter is configured to support the tray from below and to index the tray in a linear direction while supporting the tray from below. The fiber preparation apparatus further comprises a strip tool positioned at one of the plurality of process stations, and a cleave tool positioned at one of the plurality of process stations.

In the Office Action, the Examiner recognizes that Csipkes does not disclose moving a tray in a linear transport direction. However, the Examiner relies on Uehara as disclosing moving the work object in a straight line. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized the linear transport directions of Uehara in order to achieve the capability of adding subsequent operations as in Uehara. Applicants respectfully disagree.

As discussed during the telephone interview, one of ordinary skill in the art would not have been motivated to utilize a linear conveyor, as disclosed in Uehara, with the Csipkes

apparatus for the same reasons set forth above for claim 1. More particularly, the teachings of Csipkes and Uehara are not compatible in that a tray could not be moved to the various process tools of the Csipkes apparatus using a conveyor-like linear transporter, such as disclosed by Uehara.

Notwithstanding the foregoing, Applicants have amended claim 12 to recite that the transporter is configured to support the tray from below and to index the tray in a linear direction while supporting the tray from below, so as to clarify this distinction with Csipkes.

In view of the foregoing, the Examiner has failed to set forth a *prima facie* case of obviousness. The references provide no teaching, suggestion or other motivation to combine Csipkes and Uehara as suggested in the Office Action, such that the rejection of claim 12 under §103 should be withdrawn.

Claims 1-12 and 14-16

Claims 1-12 and 14-16 stand rejected under 35 U.S.C. §103 over Uehara in view of Csipkes. Applicants respectfully traverse these rejections.

Uehara, Csipkes, and independent claims 1 and 12 are discussed above.

The Examiner recognizes that Uehara does not disclose using a cleave tool for use in the fiber preparation. However, the Examiner relies on Csipkes as disclosing a cleave tool, and concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to include a cleave tool in the Uehara apparatus to ensure that the fiber was cleaved to the appropriate size prior to ferrule attachment. As a basis for reaching this conclusion, the Examiner asserts that one of ordinary skill in the art would appreciate that the cleave tool prepares the fiber for ferrule attachment by cleaving the fiber into the appropriate size, presumably based on Csipkes. Applicants respectfully disagree.

In the Office Action, the Examiner has failed to set forth a *prima facie* showing of obviousness. In particular, the Examiner points to no teaching, suggestion or other motivation in the references or common knowledge in the art to modify Uehara to include a cleave tool in view of Csipkes. Rather, the Examiner merely asserted that:

“it would have been obvious to one of ordinary skill in the art at the time of the invention to include a cleave tool in order to ensure

that the fiber was cleaved to the appropriate size prior to ferrule attachment.” (Office Action, p.7)

There is no teaching or suggestion in Uehara or Csipkes that the Uehara apparatus would benefit from the addition of the cleave tool to ensure that a fiber processed with the Uehara apparatus was cleaved to the appropriate size prior to ferrule attachment as suggested by the Examiner. In this regard, the Uehara apparatus is already configured to cut a cable into suitable lengths. The cable is subsequently stripped and a ferrule is attached to the stripped cable ends. Nothing in the record suggests that the Uehara apparatus does not cut and strip the cable to the appropriate size for ferrule attachment.

Notwithstanding the lack of any teaching or suggestion, one of skill would not have been motivated to add a cleave tool to the Uehara apparatus based on Csipkes. As indicated during the interview, Uehara and Csipkes are directed to different optical fiber processes. Uehara discloses an apparatus that attaches a termination device, such as a ferrule, to the ends of the optical fiber. In contrast, Csipkes discloses employing a cleave tool during a fusion splicing operation, *not* a ferrule attachment operation. As discussed in Csipkes, the fiber ends are cleaved just prior to the actual fusion splicing step (col. 8, lines 1-18). Although not discussed in Csipkes, the ends of the optical fiber are cleaved to provide smoothly cut ends that are relatively free of defects to effectively fuse the two ends together. If the ends are not cleaved, they may not properly fuse together, thereby rendering an inoperable or defective fused optical fiber. Thus, Csipkes provides no teaching or suggestion that would have motivated one of skill in the art to employ a cleave tool in the Uehara apparatus to cleave the ends of an optical fiber prior to attaching a ferrule to the ends of an optical fiber.

In view of the foregoing, the Examiner has failed to set forth a *prima facie* case of obviousness. The references provide no teaching, suggestion or other motivation to combine Uehara and Csipkes as suggested in the Office Action, such that the rejections of claims 1 and 12 under §103 are improper and should be withdrawn.

Claims 2-11 and 14-16 respectively depend from claim 1 and are patentable for at least the same reasons.

Claims 13 and 17

Claims 13 and 17 stand rejected under §103 as being unpatentable over Uehara and Csipkes, or alternatively over Csipkes, and in further view of Bloom (U.S. Patent No. 6,003,341). Without acceding to the propriety of these combinations, claims 13 and 17 respectively depend from claim 12 and 1 and are patentable for at least the same reasons set forth above.

Claims 18-19 and 23-25

Claims 18-19 and 23-25 stand rejected as being unpatentable over Csipkes in view of Bloom (U.S. Patent No. 6,003,341). Applicants respectfully traverse these rejections.

Claim 18 is directed towards an automated fiber preparation apparatus for an optical fiber comprising, *inter alia*, a tray, a transporter constructed and arranged to automatically index the tray, and a fiber preparation module including at least one pair of automated fiber preparation tools positioned on opposite sides of the transporter. The tray includes a fiber receptacle constructed and arranged to contain the optical fiber with opposing end portions of the optical fiber extending towards opposite ends of the tray. The pair of fiber preparation tools are constructed and arranged to automatically process the opposing end portions of the optical fiber.

As discussed above, Csipkes discloses an apparatus for splicing optical fibers, and includes a fiber handling tool which holds the fibers while being processed through the apparatus. In the Office Action, the Examiner recognizes that Csipkes does not disclose a tray including a fiber receptacle disposed between opposing ends thereof, where the fiber receptacle is constructed and arranged to contain the optical fiber therein with opposing end portions of the optical fiber extending toward the opposing ends of the tray. The Examiner also recognizes that Csipkes does not disclose placing fiber preparation tools on opposite sides of the transporter. The Examiner looks to Bloom which allegedly discloses end portions of the optical fiber extending towards opposing ends of the tray. The Examiner concludes that it would have obvious to one of ordinary skill in the art at the time of the invention to have utilized such a tray to allow for easier and quicker manipulation of the fiber ends. The Examiner further recognizes that Bloom does not disclose the positioning of the fiber preparation tools. However, the Examiner contends that one would appreciate that the use of such trays would allow for the

rearrangement of workstations as disclosed in Csipkes. The Examiner asserts that such a rearrangement is well within the capabilities of a mere practitioner of the art and would be determined by the desired logistical requirements, citing In Re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA) and MPEP 2144.04. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize fiber preparation tools on both sides of the transporter in order to ensure that space logistics are maximized. Applicants respectfully disagrees.

As indicated above, Csipkes discloses an apparatus that performs fusion splicing of optical fiber. In this regard, one of ordinary skill in the art would readily appreciate that a fusion splicing process requires that the end portions of the optical fiber be aligned with and positioned to face each other, as disclosed by Csipkes, so that the fiber ends can be fused together. Thus, one of ordinary skill in the art would not have been motivated to employ a tray for an optical fiber that maintains end portions of the optical fiber extending towards opposing ends of the tray with the Csipkes fusion splicing apparatus because the end portions of the optical fiber could then not be spliced with the Csipkes apparatus. Accordingly, the rejection of claim 18 under §103 is improper and should be withdrawn.

Notwithstanding the foregoing and for the sake of argument only, even were one of ordinary skill in the art to somehow have been motivated to employ the Bloom tray with Csipkes, the claims patentably distinguish over the combination. Csipkes and Bloom, taken alone or together, do not disclose a fiber preparation module including at least one pair of automated fiber preparation tools positioned on opposite sides of the transporter to process opposing end portions of an optical fiber as recited in claim 18. As discussed above, the robot arm employed in Csipkes transports a handling tool between process stations. Assuming that the robot arm in Csipkes is the transporter, Csipkes does not disclose a pair of automated fiber preparation tools being positioned on opposite sides of the transporter to automatically process the opposing ends of an optical fiber as recited in claim 18. Further, even if one were to assume that the loading and unloading conveyors of Csipkes is the transporter, there is no fiber preparation module with at least one pair of fiber preparation tools positioned on *opposite sides* of the transporter as recited in claim 18. Thus, claim 18 patentably distinguishes over the

combination of Csipkes and Bloom, such that the rejection under §103 is improper and should be withdrawn.

Apparently recognizing this deficiency, the Examiner cites Japikse and MPEP 2144.04 for a purported “rule” that the rearrangement or location of parts involves only routine skill in the art. The rejection is legally unsupportable. The rejection relies on a purported *per se* rule of patentability. The Federal Circuit has held that such *per se* rules have no force. See e.g., In re Ochiai, 37 USPQ 2d 1127, 1133 (Fed. Cir. 1995)(“The use of *per se* rules...flouts section 103 and the fundamental case law applying it.”). Consequently, to support a rejection, an Examiner must specifically identify *from the prior art* the motivation to make the claimed invention. There is no shortage of Federal Circuit cases reversing rejections for failure to do so. See e.g., In re Dembiczak, 175 F. 3d 994, 50 USPQ 2d 1614 (Fed. Cir. 1999)(reversing rejection because specific motivation in the prior art not identified).

Once the Japikse *per se* rule is removed as legal error, nothing is left to support the rejection of claim 18. The record is simply devoid of any teaching or suggestion that would have motivated one of ordinary skill in the art at the time of the present invention to modify Csipkes with at least one pair of automated fiber preparation tools positioned on opposite sides of a transporter between the upstream end and the downstream end thereof to automatically process the opposing end portions of an optical fiber as recited in the claim.

In view of the foregoing, the Examiner has failed to set forth a *prima facie* case of obviousness. The references provide no teaching, suggestion or other motivation to combine Csipkes and Bloom in a manner that renders obvious claim 18. Thus, the rejection of claim 18 under §103 is improper and should be withdrawn.

Claims 19 and 23-25 depend from claim 18 and are patentable for at least the same reasons.

Claims 19-22 and 26

Claim 19-22 and 26 stand rejected under §103 as being unpatentable over Csipkes and Bloom, and further in view of Uehara. Without acceding to the propriety of the Examiner’s positions, claims 19-22 and 26 depend from claim 18 and are patentable for at least the same reasons set forth above.

Claims 18-22 and 25-26

Claims 18-22 and 25-26 stand rejected as being unpatenable over Uehara in view of Bloom. Applicants respectfully traverse these rejections.

As discussed above, Uehara discloses an apparatus for attaching a ferrule to each end of an optical fiber cable. As shown in Figs. 14-19, the coiled optical fiber is moved intermittently on a conveyor through the process stations with the ends of the optical fiber facing in an upward direction as it passes through the process stations. In the Office Action, the Examiner recognizes that Uehara does not disclose a tray including a fiber receptacle disposed between opposing ends thereof, where the fiber receptacle is constructed and arranged to contain the optical fiber therein with opposing end portions of the optical fiber extending toward the opposing ends of the tray. The Examiner again looks to Bloom which allegedly discloses end portions of the optical fiber extending towards opposing ends of the tray. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized such a tray to allow for easier and quicker manipulation of the fiber ends. The Examiner further recognizes that Bloom does not disclose the positioning of the fiber preparation tools. However, the Examiner contends that one would appreciate that the use of such trays would allow for the rearrangement of workstations as disclosed in Uehara. The Examiner asserts that such a rearrangement is well within the capabilities of a mere practitioner of the art and would be determined by the desired logistical requirements, again citing In Re Japikse and MPEP 2144.04. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize fiber preparation tools on both sides of the transporter in order to ensure that space logistics are maximized. Applicants respectfully disagree.

As shown in Fig. 4 of Uehara, the conveyor racks 21 move the optical fiber on a conveyor 22 to the process stations. The ends of the optical fiber extend in a vertical direction from the same side of the conveyor rack, and the process stations operate directly above the conveyor rack to process each end portion of the optical fiber. Consequently, one of ordinary skill in the art would not have been motivated to employ a conveyor rack or tray for an optical fiber that maintains end portions of the optical fiber extending towards opposing ends of the tray with the Uehara apparatus because each end portion of the optical fiber could then not be

processed with the Uehara apparatus. Accordingly, the rejection of claim 18 under §103 is improper and should be withdrawn.

Notwithstanding the forgoing and for the sake of argument only, even were one of ordinary skill in the art to have been motivated to employ the Bloom tray with Uehara, the claims patentably distinguish over the combination. Uehara and Bloom, taken alone or together, do not disclose at least one pair of automated fiber preparation tools positioned on opposite sides of the transporter to process opposing end portions of an optical fiber as recited in claim 18. As discussed above, the conveyor racks 21 move the optical fiber on a conveyor 22 to the process stations of the Uehara apparatus. The ends of the optical fiber extend in a vertical direction from the conveyor rack, and the process stations operate directly above the conveyor rack. The Uehara apparatus does not include a pair of automated fiber preparation tools positioned on *opposite sides* of the transporter to automatically process the opposing ends of an optical fiber as recited in claim 18. Thus, claim 18 patentably distinguishes over the combination of Uehara and Bloom, such that the rejection under §103 is improper and should be withdrawn.

Apparently recognizing this deficiency, the Examiner again cites Japikse and MPEP 2144.04 for a purported “rule” that the rearrangement or location of parts involves only routine skill in the art. As discussed above, the rejection is legally unsupportable as it relies on a purported *per se* rule of patentability. As discussed above, the Federal Circuit has held that such *per se* rules have no force. See e.g., In re Ochiai. Consequently, to support a rejection, an Examiner must specifically identify *from the prior art* the motivation to make the claimed invention. See e.g., In re Dembiczak.

Once the Japikse *per se* rule is removed as legal error, nothing is left to support the rejection of claim 18. The record is simply devoid of any teaching or suggestion that would have motivated one of ordinary skill in the art at the time of the present invention to modify Uehara with at least one pair of automated fiber preparation tools positioned on opposite sides of a transporter between the upstream end and the downstream end thereof to automatically process the opposing end portions of an optical fiber as recited in the claim.

In view of the foregoing, the Examiner has failed to set forth a *prima facie* case of obviousness. The references provide no teaching, suggestion or other motivation to combine

Uehara and Bloom in a manner that renders obvious claim 18. Thus, the rejection of claim 18 under §103 is improper and should be withdrawn.

Claims 19-22 and 25-26 depend from claim 18 and are patentable for at least the same reasons.

Claims 19 and 23-24

Claims 19 and 23-24 stand rejected under §103 as being unpatentable over Uehara and Bloom, and further in view of Csipkes. Without acceding to the Examiner's positions, claims 19 and 23-24 depend from claim 18 and are patentable for at least the same reasons set forth above.

Claims 27-31 and 68

Claims 27-31 and 68 stand rejected as being unpatentable over Uehara and Csipkes, and further in view of Verwey et al. (U.S. Patent No. 4,214,848) and Brannen et al. (U.S. Patent No. 5,607,282). Applicants respectfully traverse these rejections.

Claim 27 is directed towards an automated fiber preparation apparatus for an optical fiber comprising, *inter alia*, a transporter constructed and arranged to automatically index a tray, and a fiber preparation module including at least one automated fiber preparation tool constructed and arranged to automatically process an end portion of the optical fiber. The apparatus also includes a load module, positioned at the upstream end of the transporter, that is constructed and arranged to hold a stack of trays and to automatically load the tray from the stack of trays onto the transporter. The apparatus further includes an unload module, positioned at the downstream end of the transporter, that is constructed and arranged to hold a stack of trays and to automatically unload the tray from the transporter into the stack of trays.

In the Office Action, the Examiner contends that Uehara discloses a transporter and a fiber preparation module as recited in claim 27. The Examiner recognizes that Uehara fails to disclose load and unload modules. However, the Examiner asserts that Csipkes discloses loading and unloading modules, and that one of ordinary skill in the art would appreciate that the loading and unloading modules allow for secure transport of the trays and for ease in transport of the trays to subsequent operations. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art at the time of the present invention to have utilized load and

unload modules (presumably in the Uehara apparatus) to manipulate the trays as needed for prior and subsequent operations. The Examiner then indicates that Csipkes is silent as to unloading the trays from a stack, and loading the trays in a stack. However, the Examiner looks to Verwey and Brennan as disclosing various tray or pallet stacking and unstacking systems, and asserts that stacking is a known method of reducing work floor space required for manufacturing, and that one of skill in the art would immediately appreciate that eliminating manual labor from stacking operations decreases manufacturing costs and improves work safety. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art at the time of the present invention to have utilized stacks in both the loading and unloading stages to reduce workfloor space, increase safety, and reduce costs. Applicants respectfully disagree.

Csipkes *does not* disclose loading and unloading modules as recited in claim 27. In particular, Csipkes does not teach or suggest a loading or unloading module that either automatically loads a tray onto a transporter or automatically unloads the tray from the transporter. Csipkes merely discloses what appears to be a conveyor that is positioned near the workstation. In Csipkes, the loading dock 156 is used for fiber cassette preparation and sequencing before the optical interconnect processes are performed, while the unloading dock 158 is used to transfer the optical fiber cassette for optical testing after the optical interconnect processes are performed. ***There is simply no teaching or suggestion in Csipkes that the loading and unloading docks or conveyors automatically load or unload the handling tool onto or from a transporter.***

Concerning Verwey and Brannen, the Examiner apparently looks to these references simply to demonstrate that stacking is a known method of reducing work floor space required for manufacturing, such that it would have been obvious to have employed stacks in both the loading and unloading stages of the Uehara and Csipkes combination. As an initial matter, the Examiner's reliance on Verwey and Brannen is improper as both references are non-analogous art. Verwey and Brannen are neither within the applicant's field of endeavor, nor reasonably pertinent to the particular problem of concern to the inventors. Notwithstanding the impropriety of the Examiner's reliance on Verwey and Brannen, these references fail to cure the deficiencies of Uehara and Csipkes.

Verwey and Brannen relate to systems for stacking and unstacking pallets. Neither reference discloses a load or unload module that automatically loads or unloads an optical fiber tray to or from a transporter which indexes the tray. Rather, Brannen discloses a depalletizing apparatus for unloading items, such as cases of plastic beverage containers and the like, stacked on a pallet (Brannen, abstract and col. 1), while Verwey discloses a palletizer for loading bundles of folded cardboard boxes into stacks onto a pallet (Verwey, abstract and col. 1, line 5 to col. 2, line 15). There is simply no teaching or suggestion that either of these systems is even capable of stacking or unstacking either the Uehara conveyor racks 21 or the Csipkes precision handling tools 300. In fact, there is no teaching or suggestion that either the Uehara conveyor racks 21 or the Csipkes precision handling tools 300 can even be stacked on each other.

In view of the foregoing, even were the references properly combinable, which they are not, claim 27 patentably distinguishes over the references. In particular, the references do not teach or suggest an automated fiber preparation apparatus including load and unload modules that automatically load and unload an optical fiber tray to and from a transporter which automatically indexes the tray as recited in the claim. Accordingly, the rejection of claim 27 under § 103 is improper and should be withdrawn.

Claims 28-31 and 68 depend from claim 27 and are patentable for at least the same reasons.

Claims 27-28 and 68

Claims 27-28 and 68 stand rejected as being unpatentable over Csipkes in view of Verwey et al. and Brannen et al.. Applicants respectfully traverse these rejections.

In the Office Action, the Examiner contends that Csipkes discloses a transporter and a fiber preparation module as recited in claim 27. The Examiner further contends that Csipkes discloses loading and unloading modules, and asserts that one of ordinary skill in the art would appreciate that the loading and unloading modules allow for secure transport of the trays and for ease in transport of the trays to subsequent operations. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art at the time of the present invention to have utilized load and unload modules to manipulate the trays as needed for prior and subsequent operations. The Examiner then indicates that Csipkes is silent as to unloading the trays from a

stack, and loading the trays in a stack. However, the Examiner looks to Verwey and Brennan as disclosing various tray or pallet stacking and unstacking systems, and asserts that stacking is a known method of reducing work floor space required for manufacturing, and that one of skill in the art would immediately appreciate that eliminating manual labor from stacking operations decreases manufacturing costs and improves work safety. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art at the time of the present invention to have utilized stacks in both the loading and unloading stages to reduce work floor space, increase safety, and reduce costs. Applicants respectfully disagree.

As discussed above, Csipkes *does not* disclose loading and unloading modules as recited in claim 27. In particular, Csipkes does not teach or suggest a loading or unloading module that either automatically loads a tray onto a transporter or automatically unloads the tray from the transporter. Verwey and Brannen fail to cure this deficiency as neither reference discloses a load or unload module that automatically loads or unloads an optical fiber tray to or from a transporter which indexes the tray. Thus, claim 27 patentably distinguishes over Csipkes, Verwey and Brannen, such that the rejection under §103 is improper and should be withdrawn.

Claims 28 and 68 depend from claim 27 and are patentable for at least the same reasons.

Claims 28-31

Claims 28-31 stand rejected as being unpatentable over Csipkes, in view of Verwey et al. and Brannen et al. as applied to claims 27-28, and further in view of Uehara. Without acceding to the Examiner's positions, claims 28-31 depend from claim 27 and are patentable for at least the same reasons set forth above.

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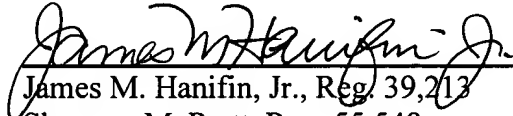
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CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the undersigned attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,


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